

High ceilings and long views give this 540-sq.-ft. infill cottage an expansive personality

# The Big Little Backyard House

BY JOHN HOPKINS

Shortly after Suzie McKig moved her family from Los Angeles and bought a house in Berkeley, Calif., her mother, Billie, decided to follow suit. Billie's requirements were simple: She wanted a home of her own, and she wanted to live close to her daughter and grandchildren. However, Billie's limited budget put finding a house on a full-size lot in Berkeley out of the question. So Suzie contacted me to explore building a new home for her mother in her own backyard.

The idea our firm proposed was to locate the new house at the rear of the property to maximize space for a garden between the two houses. A protected California live oak tree would have to be accommodated, and setback and height limits respected; most critically, zoning requirements would

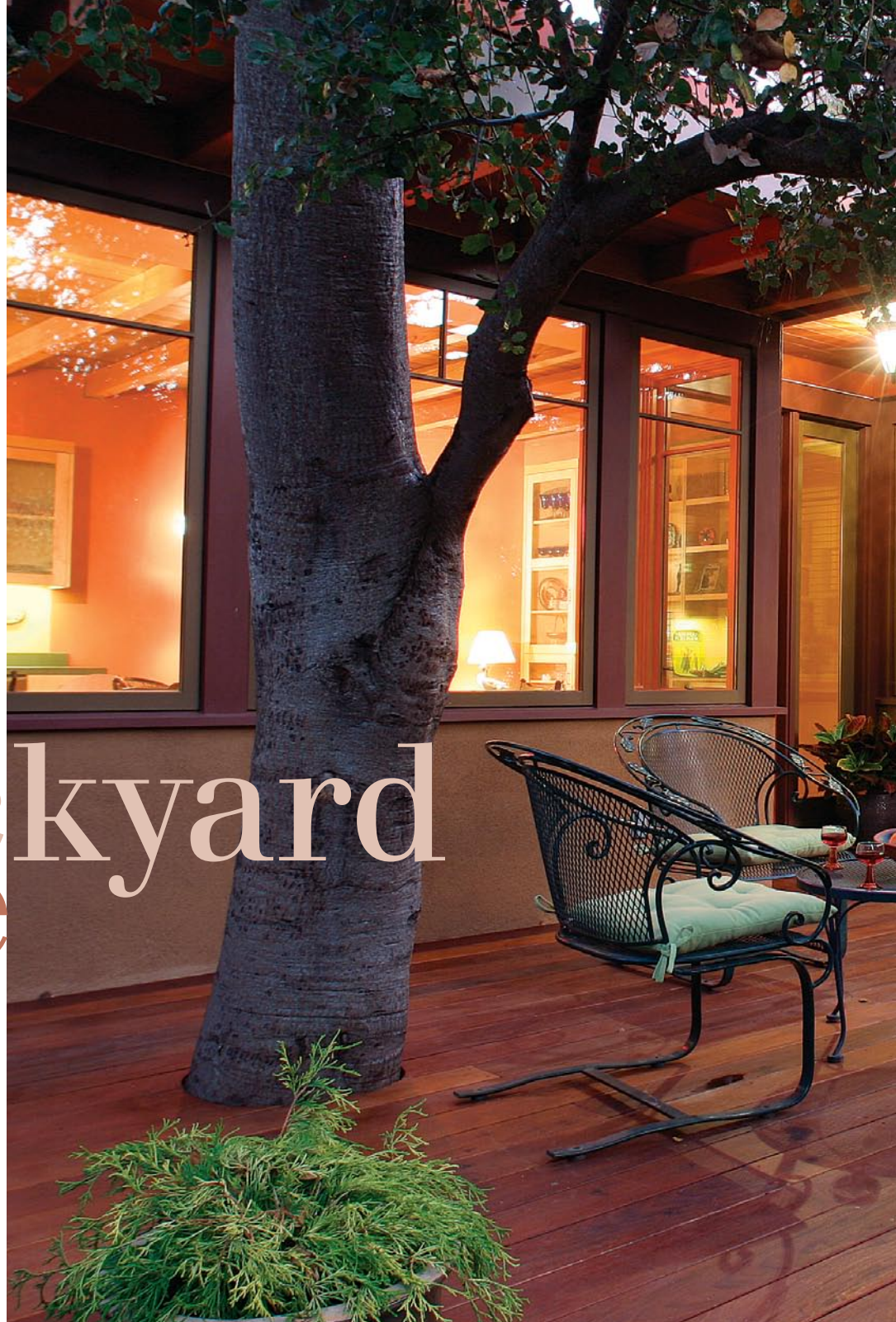
restrict living space to a mere 540 sq. ft. Our challenge was to create a home for Billie that would be compact and comfortable.

## Fitting full-size function in a compact package

Our first task was simply to make the tiny house work. After all, this was going to be Billie's permanent home, and it would have to accommodate all the typical func-

tions of her previous house in one-third of the floor area. As a result, we had to omit wasted space, consolidate activities, and think small—very small.

Even in larger homes, we try to reduce wasted space by minimizing unnecessary circulation areas such as halls, stairs, and a dedicated entry. Why spend money on space whose only purpose is to lead to other rooms? In Billie's house, we reduced such waste to zero: All







**The out-back retirement house.** Billie McKig's cottage sits at the far end of her daughter's backyard, leaving plenty of space between the two houses for daylight and a future garden. Part entryway, part focal point, the deck is an outdoor room that nearly doubles the living space. The live oak's canopy shades the cottage in the afternoon. Photos taken at A and B on floor plan.



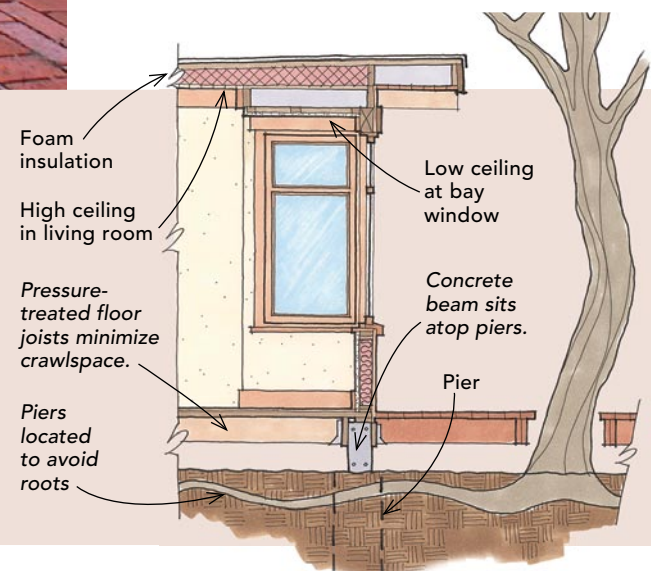
circulation occurs within the main rooms themselves (floor plan p. 89). Next, we consolidated as many functions into as few rooms as possible, thus allowing different activities to share space. The living room, the kitchen, and the dining area are combined, and all enjoy a view of the fireplace and the garden. A desk tucked in to a corner of the same room fills the role of home office. The bedroom occupies a separate space. Combining these uses in only two main rooms helps to make the house seem bigger. Each discrete space is similar to its counterpart in a house twice the size.

Given our mild climate, we also were able to eliminate space for mechanical equipment. A gas fireplace on a thermostat heats the house, and a direct-vent tankless water heater mounted outside on the back wall satisfies domestic hot-water needs.

Even using these strategies, though, we were hard-pressed to fit in everything that would

## A tree-friendly foundation

California live oak trees are protected in Berkeley, and new construction within the drip line of one of these trees is prohibited. Working with a structural engineer, a licensed arborist, and the building department, we came up with a plan for protecting the tree's root structure. The solution was an above-grade beam foundation with no excavation other than individual piers located to avoid major roots (drawing right). This strategy allowed us to keep the root structure intact and to incorporate the tree into the design of the deck. The live oak now acts as the focal point of the deck while providing much-needed shade from the afternoon sun.





make this a real home. Compact appliances were a big help in the little kitchen. A 2-ft.-wide refrigerator, a 2-ft.-wide range, and a single-bowl sink all save counter space, while a single-drawer dishwasher allows for more storage space in base cabinets. For laundry, a dual-function washer/dryer in the closet takes up as little space as possible ("Sources," facing page).

### Three strategies help to make this small house seem big

After combining multiple functions in a single space, the next-most-effective way to make a small house seem bigger is to maximize the ceiling height. I think that we have become so accustomed to 8-ft. ceilings that even a slight increase can deliver results. On this project, we were sandwiched between the city's 12-ft. height limit and a raised floor dictated by the type of foundation we used to save the oak tree (sidebar p. 87). Consequently, we had to hunt for additional headroom. Using pressure-treated floor framing allowed us to reduce the depth of the crawlspace, and exposing the rafters gained additional inches. The result is an 8-ft. 9-in. ceiling, which seems inexplicably generous.

To make the spaces feel more open, we ganged windows and doors, and ran them to the ceiling. Besides increasing daylight, this strategy breaks up the wall and opens the views, making the interior seem less confined. In the bathroom, a floor-to-ceiling glass-block wall provides both privacy and abundant light (photo facing page). An 8-ft.-tall glass door also creates a grand entry to the modest house.

Finally, we added an exterior living area to expand the sense of spaciousness. A deck, defined on two sides by the house and on a third by the oak, is located centrally as the focus of the living room and the bedroom. The deck's use as entry access makes it an active extension of the house.

### Using high-quality materials and getting adventurous with color

The star of the show is a red-cedar ceiling with matching exterior eaves. The exposed 4x6 rafters are Douglas fir, as are the windows, doors, and trim. We picked bamboo

**Space can be in the details.** Built-in cabinets maximize storage, and tall ceilings give the room a lift. The cool green of the bedroom wall recedes, making it seem farther away. Photo taken at C on floor plan.



**A kitchen tucks in to a corner of the main room.** Downsize appliances and base cabinets on legs don't overpower the space. Photo taken at D on floor plan.

**Exploit the view of the garden.** Tall windows, ganged together for maximum impact, overlook the deck and take in afternoon sun. At the right, a built-in desk provides a compact home office. Photo taken at E on floor plan.

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For a video tour and an interview with the architect and the owner, visit our Web site.





**A wall of daylight in a tiny bath.** Facing east, the glass-block wall in the shower is a cheerful wake-up call every morning. Photo taken at F on floor plan.

## SPECS

**Bedrooms:** 1

**Bathrooms:** 1

**Size:** 540 sq. ft.

**Cost:** \$400 per sq. ft.

**Completed:** 2006

**Location:** Berkeley, Calif.

**Architect:** Hopkins Studio—Architecture & Design; John Hopkins, principal; Jonathan Heuer, associate

**Builder:** Paul Cerami, Cerami Builders

## SOURCES

**Fisher & Paykel** single DishDrawer  
<http://usa.fisherpaykel.com>

**LG** washer/dryer combo WM3431  
<http://us.lge.com>

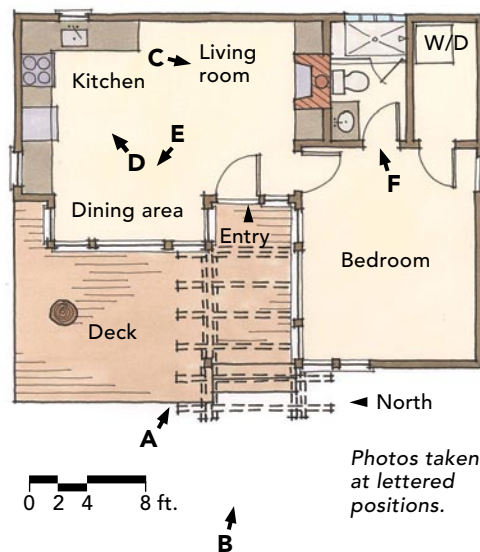
**Premier** 24-in. pro-style gas range P24S310BP

[www.premierrange.com](http://www.premierrange.com)

**Sanyo** refrigerator (24 in. by 58 in.) SR1030  
[www.sanyo.com](http://www.sanyo.com)

## Making the most of 540 sq. ft.

Two primary rooms arranged in an L-shaped plan eliminate space-hungry hallways and divide the house equally into public and private realms. Most of the windows are focused on the outdoor space, creating a sense of transparency and spaciousness.



flooring for its durability and for its compatibility with the color of the maple cabinetry.

When it came to color selection, Suzie McKig used her talents as a professional graphic designer. She chose interior and exterior colors that fit with the site and complement the natural materials. Surfaces are painted contrasting colors to delineate different areas within the main living space; in the bedroom, four subtly different tints of apple green are arranged to look the same on walls that receive different amounts of daylight. The exterior colors complement the wood deck and trellis, and help to tie the house to its garden setting. These kinds of color and material selections inject energy into a small space.

What does Billie think about her new home? Above all, she loves being close to her daughter and grandchildren, yet she also enjoys the privacy of her own place. She particularly likes the live oak tree, the wood ceilings, and all the tall windows. Billie also has been surprised by how well suited the small house is to her; she actually welcomed the chance to reduce “the amount of material possessions I have around.” Another plus: “It’s a breeze to keep clean!” □

John Hopkins ([www.hopkinstudio.com](http://www.hopkinstudio.com)) is an architect in Berkeley, Calif. Photos by Charles Miller.